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AUTHOR	MacAllum, Keith; Worgs, Donn; Bozick, Robert; McDonald, Deanne
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ABSTRACT

The Lansing Area Manufacturing Partnership (LAMP) is an academically rigorous, business/labor-driven school-to-career program in Lansing, Michigan, that includes business, union, school, and parent partners. The effects of participation in LAMP on transitions from school to higher education and work were examined in a longitudinal study that compared the progress of LAMP students and non-LAMP participants from the classes of 1998, 1999, and 2000 at more than 20 high schools. Changes in educational and employment status were tracked through mailed surveys administered every June and December. The LAMP students pursued postsecondary education at higher rates than the comparison groups did. As a group, the LAMP students were maintaining good grades and a significant majority were working and attending school at the same time. Compared to the non-LAMP participants, the LAMP students participated in more career development activities during their senior year in high school and appeared to have been better prepared for the transition from high school to college and employment. Many LAMP graduates were initially dissatisfied with their jobs, particularly with their opportunities for training and advancement, and they have changed jobs at higher rates than the comparison group. However, many LAMP graduates considered their job changes positive steps toward their career goals. (Contains 10 figures.) (MN)

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ED 462 630

TRANSITIONING TO COLLEGE AND CAREER

INTERIM FINDINGS OF THE LAMP LONGITUDINAL STUDY

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K. MacAllum

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Keith MacAllum, Ph. D.
Donn Worgs, Ph. D.
Robert Bozick
Deanne McDonald

Academy for Educational Development
National Institute for Work and Learning
1825 Connecticut Avenue, NW
Washington, DC 20009-5721

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1 INTRODUCTION

Launched in 1997 by the United Auto Workers-General Motors Center for Human Resources (CHR), the Lansing Area Manufacturing Partnership (LAMP) has established itself as a model school-to-career initiative. Its integrated employer-driven curriculum, its emphasis on project-based learning, its team teaching structure, and the opportunity for staff and students to establish close, ongoing interactions with employees distinguish LAMP among other school-to-career (STC) programs. Three local partners comprise the LAMP partnership: the Ingham Intermediate School District, the United Auto Workers Locals 602 and 652, and the Lansing Car Assembly Center.

The CHR commissioned the Academy for Educational Development National Institute for Work and Learning (AED-NIWL) to conduct an extensive study of the LAMP program. At CHR's request, the study, which began in the Spring of 1998, involved examining three different phases of the LAMP initiative: the implementation process; short-term impacts on students and other stakeholders; and long-term impacts on students. This is the first report on the long-term impacts on students.

The true test of how well LAMP prepares graduates for post-secondary education and careers in manufacturing and other industries can only be answered over time, by tracking their transition into further education, training, and the workplace and by assessing their performance on the job. The longitudinal study of LAMP participants is doing just that by addressing many questions of interest to the multiple stakeholders involved in the LAMP initiative. These issues are equally important to the broader school-to-career (STC) community. STC practitioners, researchers, and policy proponents are extremely interested in documenting the long-term effects of student participation in integrated, contextual, and work-based learning experiences.

This report provides answers to the following questions concerning short-term and long-term outcomes:

- What proportion of LAMP graduates pursue higher education or more training?
- What forms of training do they pursue?
- What proportion of LAMP graduates are employed after high school graduation?
- What is their employment trajectory with respect to wages, promotions, benefits, career development activities, etc.?
- How satisfied are they with their jobs?
- How prepared are they for the transition to young adulthood?

In addition to answering these questions and documenting the actual effects of participation over time, the longitudinal study of LAMP graduates represents a major contribution to the study of school-to-work in general. The future of educational reform requires better understanding of the relative and long-term effects of participation in school-to-work programs.

II RECENT RESEARCH ON SCHOOL TO CAREER

The LAMP longitudinal study offers a rare opportunity to measure the impacts of a comprehensive school-to-career program and to add significantly to the accumulating knowledge about the impacts of school-to-career programs. There are few other longitudinal evaluation efforts. More common are cross-sectional studies of graduates from STC programs. While these often fail to shed light on the long-term effects of participation, they do reveal an impressive set of near-term positive impacts stemming from participation in STC. Typical findings include the following:

Academic Impacts:

- Students in school-to-work programs tend to do just as well as students in magnet programs in terms of GPA, attendance, and enrollment in college.
- Mentoring is positively related to higher grades.
- Participants have better attendance than non-participants.
- Participants are just as likely to attend college as other students, and some studies find that participants are *more* likely to attend college.
- Specific benefits for "at-risk students" include:
  - Improved attendance
  - Less likely to drop out
  - Less likely to be suspended
  - More likely to graduate on time - even if entering program at risk of not doing so

Work/ Employment Impacts:

- STC graduates are more likely to report that they have meaningful jobs, or that they are working in jobs that fit with their career plans
- STC graduates are more likely than comparable students to be in a job for at least one year
- Students who participate in STC programs are more likely to be employed and earn higher wages than counterparts

Along with the positive academic and employment outcomes, STC programs tend to positively affect the students' morale and achievement. Students consistently report that STC programs provide a nurturing, supportive environment. Students report that adults care about their success and help them plan their futures. In one study, students reported that being a part of a particular program felt like being "part of a family."

In all, the research to date indicates that STC programs are having measurable impacts on students' lives. The bar of expectations should then be fairly high for comprehensive STC programs like LAMP that have been functional for some time. Our interim findings show that LAMP graduates are doing well. When comparing LAMP graduates with other high school graduates, we find that LAMP graduates have higher levels of educational attainment, higher levels of interest in and employment in the automotive or manufacturing industries, earn higher wages, move into jobs that require more responsibility, and are better prepared for the transition to college and to career.

III METHODOLOGY

The LAMP longitudinal study is designed to track post-high school educational trajectories and employment activities of LAMP graduates and a comparison sample. Longitudinal research is complicated. Selecting appropriate comparison groups, maintaining contact with research samples over time, and applying proper statistical controls are just some of the difficulties associated with longitudinal studies. This section describes the methods and strategies AED-NIWL employed to address these issues.

Research Sample

The study tracks the educational and employment trajectories of LAMP students following their high school graduation. To avoid the limitations of a small sample size we chose to follow three cohorts of LAMP students: the Classes of 1998, 1999, and 2000. Their progress is being compared to a group of students who have graduated from the same set of high schools.

Comparison Sample Selection

For analytical purposes, it was imperative that a scientifically defendable comparison sample be drawn. We matched LAMP students one-to-one with comparable students based on gender, race, age, GPA, and school attended. To identify the students that would comprise the comparison group, we worked closely with school administrators and counselors, who were very supportive of the study. With their help we were able to construct comparison groups for both the Classes of 1999 and 2000.[1]

Sample Attrition

Attrition (loss of contact with the research sample) is a major issue in longitudinal research. Even in shorter studies, it is not uncommon to lose 25-50% of the original sample. Simply keeping track of where graduates go once they leave the school system is a complex task. This is of course especially problematic when starting with a small sample at the outset. Fortunately, we have been able to keep attrition to a bare minimum. With respect to the LAMP students, two particular advantages have worked in our favor: their strong commitment to the LAMP program and the peer bonding that took place over the academic year. Maintaining contact with the comparison group has been a bit more challenging. However, the vast majority of both samples (93.8%) have remained in the study.

Data Collection Process

To track changes in educational and employment status, mailed surveys are administered to members of both samples every six months (in June and December). Individuals failing to return the survey by the due date are contacted by telephone. At that point the survey is either completed by telephone or the telephone call serves as a reminder. As each cohort joined the

[1]We also collected data from 20 members of the class of 1998. However, we were unable to construct a comparison sample for this class as they had already graduated when the study began. Because of the small sample size and lack of a comparison group, their figures are not included in this report. No significant differences, however, exist between the Class of 1998 and the other cohorts.

study, baseline data, such as demographic information and attitudinal orientation with respect to his or her high school experience as well as LAMP, were collected.

Data Analysis

Each wave of data collection yields an independent set of analyses, illustrating graduate progress to that point in time. With each subsequent wave of data, new and comparative analyses can be conducted (e.g. cohort trajectory as a whole, comparisons from current year to previous years, and comparisons between groups). Unless otherwise noted, all statistics in this report are for the Class of 1999 using data gathered between December 1999 and June 2000.

IV BASELINE STUDENT PROFILE

Demographics

The LAMP students come from over 20 diverse high schools in the Lansing Tri-County area. Students apply to participate in LAMP during their junior year of high school. Selected students then attend LAMP, housed in a GM facility, for half the school day for their entire senior year. Baseline demographics of our samples are presented in Table 1.

Table 1: Sample Demographics

	LAMP	Comparison
Gender		
Female	43.8%	45.7%
Male	56.3%	54.3%
Race/Ethnicity		
African American	12.5%	17.4%
Asian American	2.1%	2.2%
Latino/Hispanic	8.3%	4.3%
White	72.9%	76.1%
Other	4.2%	0.0%
Program of Study		
Academic/College Prep	56.3%	43.5%
General	35.4%	43.5%
Vocational/Technical	8.3%	13.0%
Graduated from High School		
Yes	100.0%	95.7%
No	0.0%	4.3%
Senior Year GPA	3.30	3.29
Sample Size	48	46

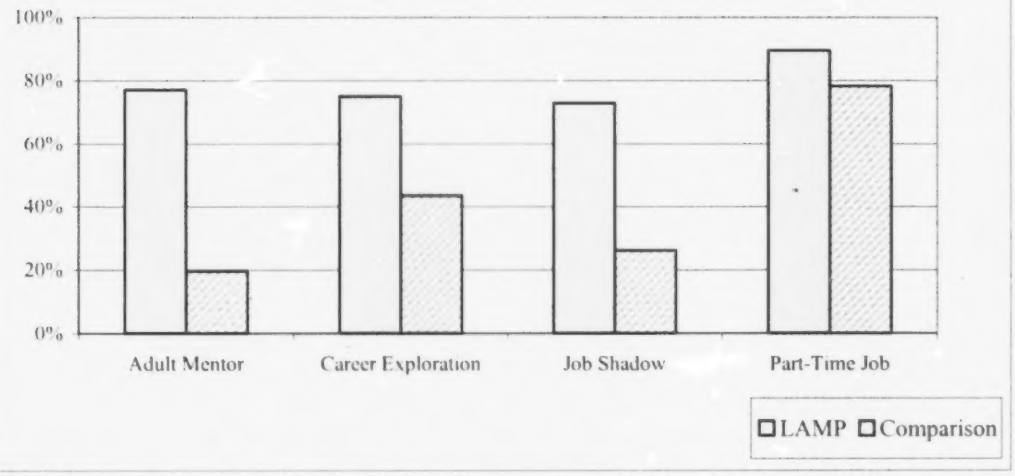
With respect to gender and race/ethnicity, the proportions of both samples are comparable. There are slightly more African Americans and Whites in the comparison sample than the LAMP sample. The greatest differences rest in the program of study – more LAMP graduates were in the academic/college prep track and more graduates from the comparison sample were in the vocational/technical track. The entire LAMP sample graduated from high school, whereas 4.3% of the comparison sample had dropped out.

Differences in Senior Year Experiences of LAMP and Comparison Group

The differences between the experiences of LAMP students and the experiences of the typical high school student are numerous. It is no surprise that few traditional students have access to learning environments as richly contextual or complex as a GM assembly center. Furthermore, we know that few students are exposed to a comparable project–based curriculum or to work–based learning opportunities. For analytical purposes, we

wanted to verify the relative access to career development activities. The difference between the experiences of the LAMP students and those of their counterparts is clearly reflected in the disparities in the rates of participation in career development activities. Statistics reflecting differences in senior year experiences are presented in Figure 1.

Figure 1: Career Development Activities During Senior Year; Class of 1999



LAMP students were much more likely to have participated in key activities connected to successful transitions from school to work. For example, LAMP students were more than four times more likely to have had an adult mentor than their counterparts. Furthermore, LAMP graduates participated in career exploration activities and job shadows at much higher rates than the comparison group. It is also important to note that over the three years of the LAMP program's existence, each subsequent class has had increasing levels of participation in each of these activities. In fact, almost all of the members of the LAMP Class of 2000 participated in certain activities: over 90% participated in career exploration activities; 94% participated in a job shadow; and 100% had an adult mentor.

The LAMP students had significantly different levels of access to career development activities, in addition to their exposure to the unique LAMP curriculum. It is clear that the model has already demonstrated definite short-term successes.[3] What is not yet clear is the extent to which this model will accomplish the long-term goal of facilitating students' successful transition from school to a productive, well paying career of their choice. While it is still early, there are indicators that suggest the model will prove to have measurable long-term impacts as well. We turn now to a more in-depth discussion of the current findings of the longitudinal study. We begin with educational attainment and then consider the transition to employment.

[3] See MacAllum et al. 1999, *Manufacturing Educational Change*. Washington, DC: Academy for Educational Development.

V EDUCATIONAL ACHIEVEMENT

While LAMP is generally considered a career preparation initiative, LAMP students have consistently pursued higher education at exceptional rates. Virtually all of the students (98% of both classes) reported planning to pursue post-secondary education. Thus far, graduates have been actualizing these plans. *LAMP students pursue post-secondary education at rates higher than comparable students.* For example, 94% of the Class of 1999 have participated in post-secondary education since graduation, which is higher than the rate for the comparison group (78.3%) and the rate for the entire tri-county area (89%).[4] In addition to high enrollment rates, other statistics are worth noting.

For the Class of 1999, as of June 2000:

- 71% of all LAMP graduates were enrolled full-time in school or a training program versus 65% of the comparison group – both are higher than the countywide rate of 63%.[5]
- 23% of the LAMP graduates were enrolled part-time in school or a training program, versus 13% of the comparison group.
- 70.7% of LAMP students were enrolled *and* working at the same time versus 56.5% of the comparison group.
- Despite the higher rates of employment, LAMP graduates' cumulative grade point averages were comparable to those of the comparison group. The LAMP average GPA was 2.93 versus comparison group average GPA of 3.09.

Given that nearly all of the Class of 2000 plans to pursue post-secondary education, we suspect that this trend will continue. It is not clear whether this class will enroll at higher rates than their comparison group. It should be noted that almost all of the members of the comparison group plan to pursue post-secondary education as well. The December 2000 survey will provide data to answer this question.

Schools Attended and Majors

The vast majority of LAMP graduates pursuing post-secondary education are attending either four- or two-year colleges. The schools of choice for both the LAMP graduates and the comparison group are Lansing Community College and Michigan State University. Over half of the LAMP graduates and over half of the comparison group attend one of these two schools.

The distribution between two-year and four-year schools is worth noting. As Figure 2 illustrates, the majority of the LAMP Class of 1999 are enrolled in a two-year college. The bulk of these students attend the Lansing Community College (LCC). This is not surprising given the exposure LAMP students have had to LCC during the program. For example, both the LAMP Capstone Experience presentations and the graduation ceremony are held on the LCC campus.

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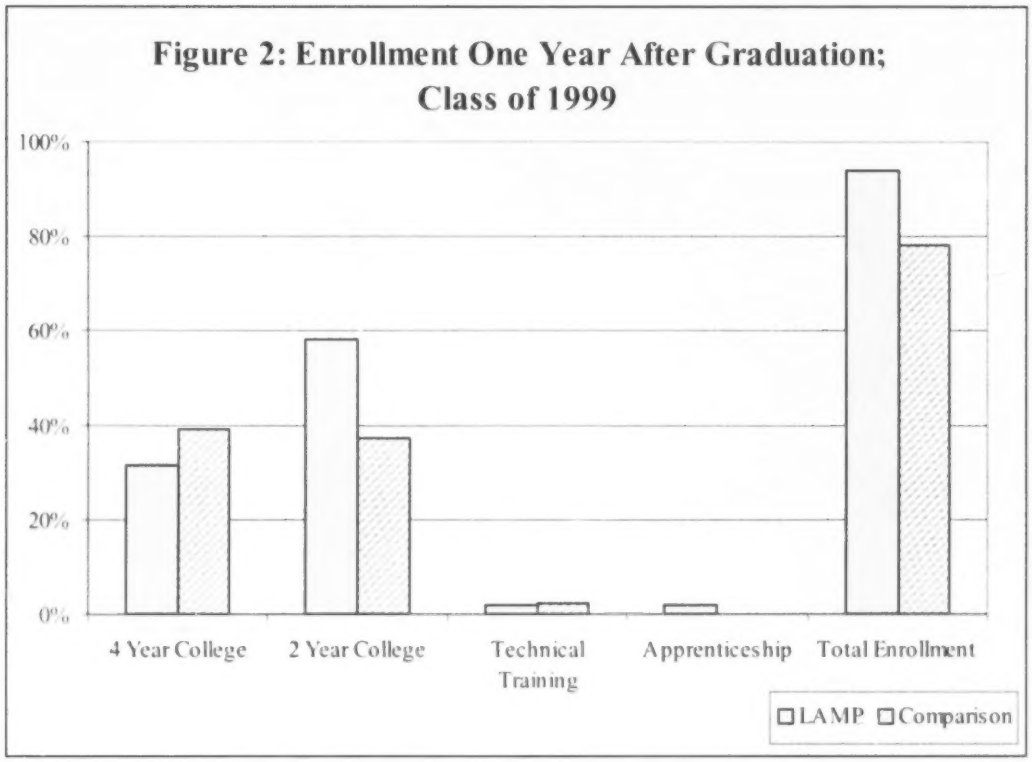
[4] Public Policy Associates (2000), Lansing Tri-County EAG: High School Graduate Follow-Up Study. Lansing, MI: Authors.

[5] Ibid.

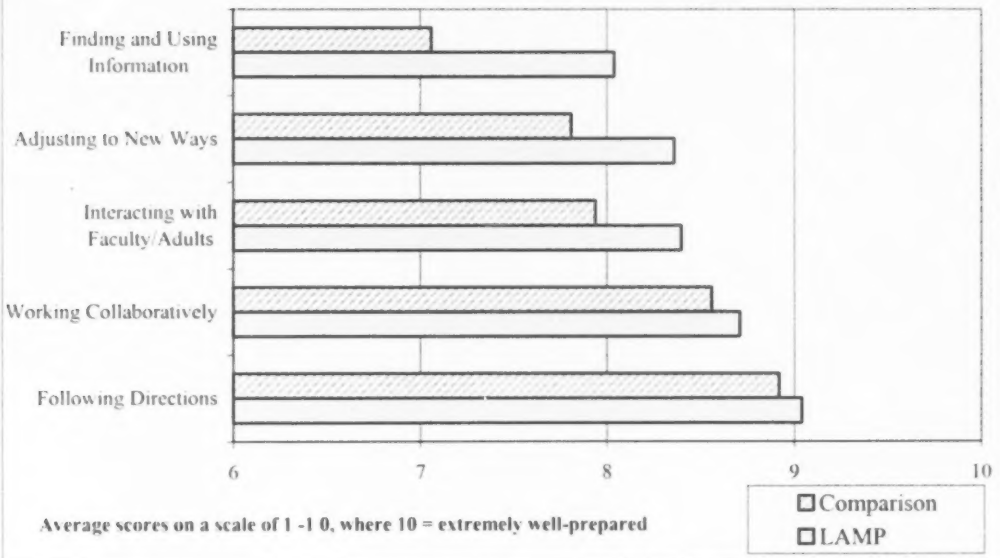


With respect to academic majors, the majority of the LAMP graduates enrolled in post-secondary education were "undecided" (24%). The second largest group identified themselves as majoring in engineering (13%). The most popular major for the comparison group was computer science, selected by 14% of the comparison group graduates who were enrolled in post-secondary education.

Preparation for Post-secondary Education

Overall, LAMP graduates reported that they were well prepared for the social and environmental changes they encountered in post-secondary education. Both samples were asked how prepared they were for five factors of the transition to higher education using a scale of one to ten, with ten representing being extremely well prepared. Means are shown in Figure 3. On every item, LAMP graduates report being better prepared for the transition to higher education than their comparison group counterparts. The largest differences exist for "Finding and Using Information" and "Adjusting to a New Environment."

Figure 3: Preparation for College; Class of 1999



Average scores on a scale of 1 -1 0, where 10 = extremely well-prepared

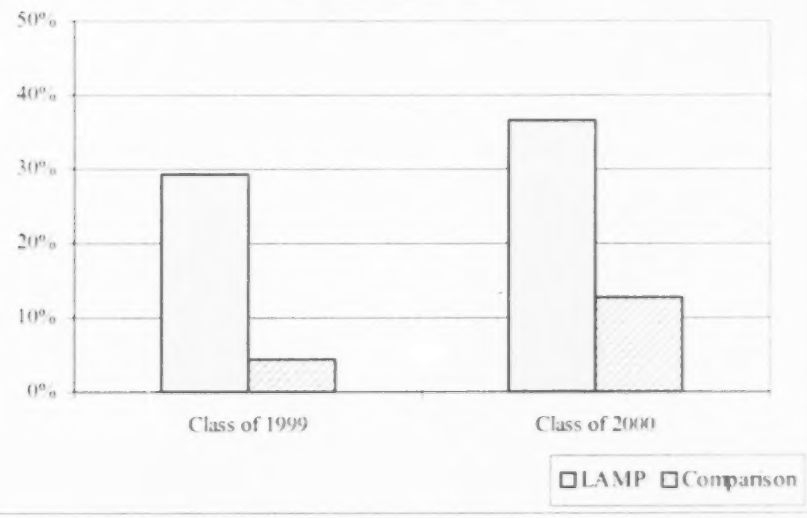
VI CAREER TRAJECTORIES

The objective of school-to-work programs is to facilitate the successful transition of young people into stable, well paying careers that match their interests and abilities. It is of course too early to conclude definitely whether LAMP has met this objective for its graduates, yet we have found promising indicators of the progress of LAMP graduates along these lines. *Thus far, the results of this study indicate that LAMP graduates are indeed progressing toward their career goals and in most areas are out-performing their counterparts.*

Occupational Goals

A key difference between the LAMP graduates and the comparison group is in the area of occupational goals. For both the Classes of 1999 and 2000, LAMP and comparison group students were relatively equal in terms of the percentage of students who reported having clear occupational goals. However, as Figure 4 indicates, LAMP students reported that their goals involved the automotive or manufacturing industries at much higher rates. It is also noteworthy that the proportion of both samples claiming such goals has increased.

Figure 4: Planning a Career in Automotive Manufacturing



While both LAMP graduates and the comparison group report having clear goals at comparable rates, differences exist in their confidence in achieving these goals. LAMP graduates report having more confidence that they will achieve their career goal, and a slightly higher percentage of the LAMP graduates claimed to know the right steps to take to pursue the career of their choice.

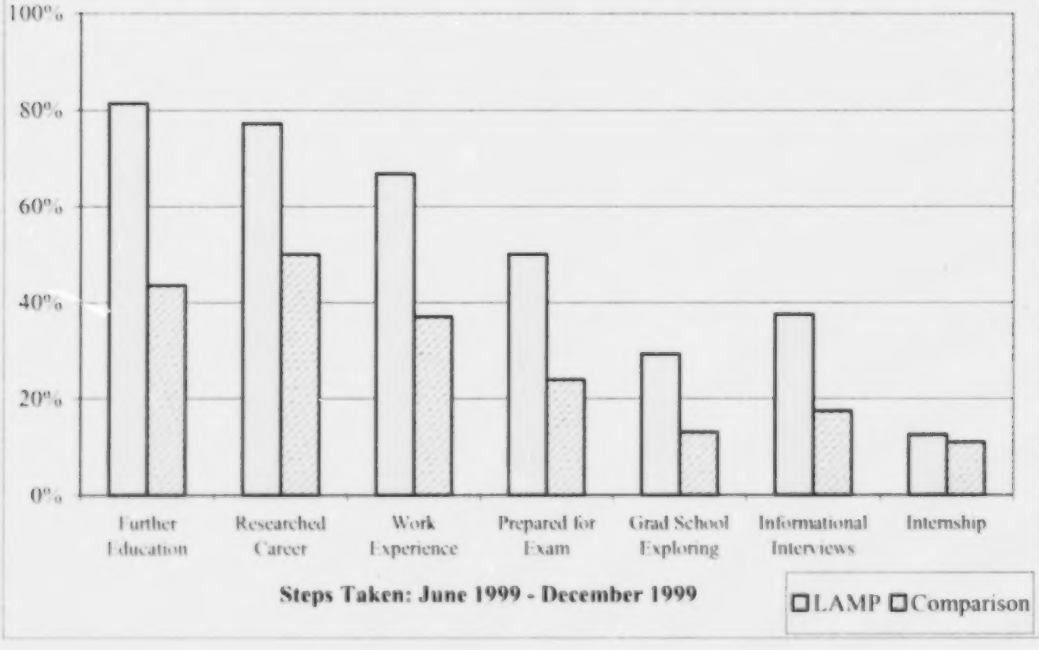
- 75% of the LAMP graduates and 76% of the comparison group reported that they have a clear occupational goal.

- More LAMP graduates (39.6%) are "Absolutely Confident" that they will achieve their goal than the comparison group (23.9%).
- 83.3% of LAMP graduates report that they know the right steps to take to enter the occupation of their choice versus 80.4% of the comparison group.

Career Development Steps

Figure 5 illustrates that the members of the LAMP Class of 1999 have consistently taken more tangible steps to achieve their career goals than their counterparts. In the six months following high school graduation, almost 40% more LAMP graduates explored further education or training, 25% more obtained specific work experience, close to 30% more conducted career research, and 26% more prepared for an entrance exam. In most cases, LAMP graduates participated in these career-building activities at nearly twice the rate of their counterparts.

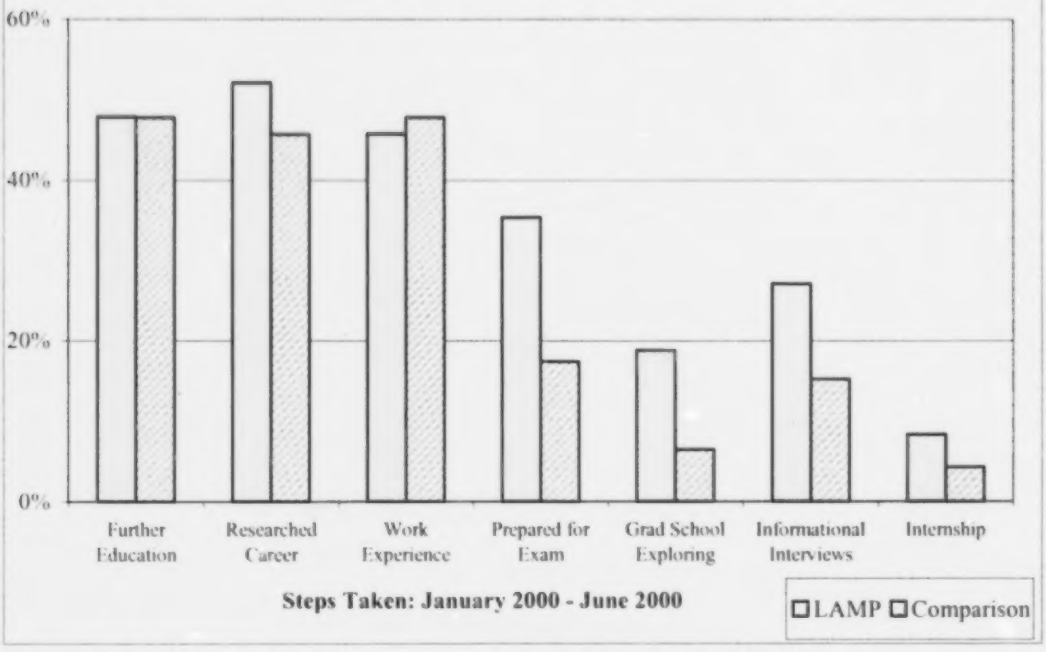
Figure 5: Career Development Steps; Class of 1999



When we asked about the next six months (January to June of 2000) in the subsequent survey, we found that in all but one category the LAMP students again participated at higher rates (Figure 6). However, the differences were much lower. Although there was some increase in the levels of participation among LAMP graduates, the narrowing gap was mostly due to lower participation rates of LAMP graduates. This suggests that as they exited high school, LAMP graduates were more likely to immediately take tangible steps towards their career goals. However, over time these rates may converge with the participation rates of

students who have not been exposed to the LAMP program. Future patterns of career building will continue to be monitored over time.

Figure 6: Career Development Steps; Class of 1999



Employment

Interesting differences between the LAMP graduates and the comparison group emerge when considering employment histories. The data received from the first survey revealed that the comparison group had a *higher* proportion that was working, had higher salaries, spent longer time on the job, and was not far behind in terms of the percent employed in automotive/manufacturing industries. However, data from the second survey revealed that there were some significant changes along these lines.

As of December 1999:

- 73% of LAMP graduates and 76% of comparison group were employed.
- The comparison group graduates had been in their positions longer than the LAMP students: (10.34 months versus 6.71 months).
- The comparison group received higher wages: $7.27 per hour to $6.85 per hour.
- 8.6% of LAMP graduates and 5.7% of the comparison group worked in the Automotive/Manufacturing industries.

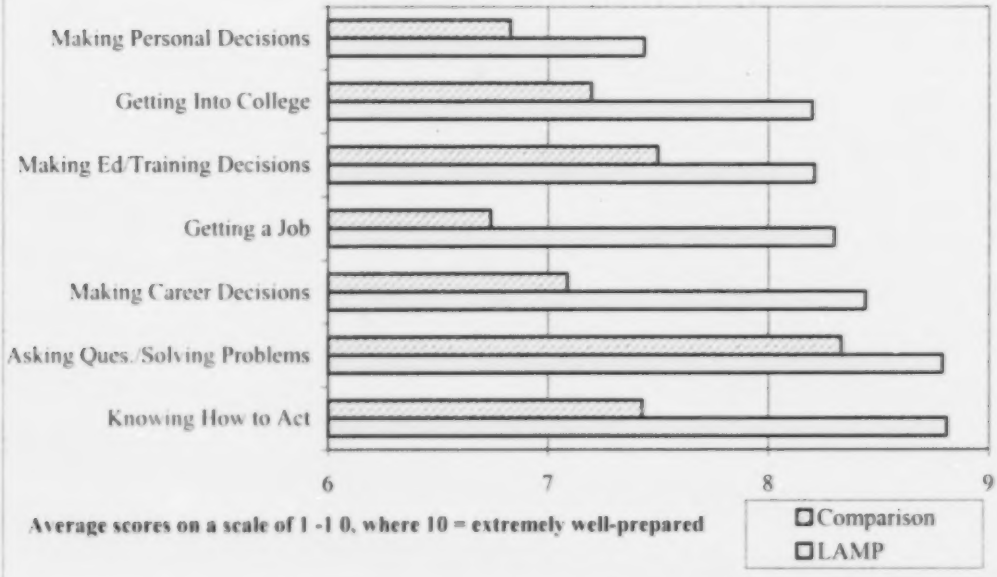
By June 2000, some important changes had taken place.

- The percentage of each group that was employed rose substantially (to 98% for LAMP graduates and 96% for the comparison group) – both surpassing the local employment rate for this age group (74%)[6]
- The average hourly wage rose significantly ($1.90) for the LAMP graduates: from $6.85 to $8.75 per hour, while the comparison group rose from $7.27 to $8.33 ($1.06).
- 22% of the LAMP graduates were working in the automotive/manufacturing industries while only 10% of their counterparts did the same.

Preparation for Life after High School

Both classes were asked to rate their preparation for various aspects of life after high school. These questions are particularly useful for two reasons. First, they indicate what aspects of post-secondary life graduates feel they were best and least prepared for. Secondly, we are able to consider the differences between the LAMP graduates and the comparison group's assessments of themselves and their high school experiences. Means are shown in Figure 7.

Figure 7: How Helpful Was Last Year of High School?
Class of 1999



All the graduates were asked specifically how helpful their last year of high school was in preparing them for particular activities. On all measures, the LAMP graduates rated their last year of high school higher than the comparison group. "Knowing how to act at work" and "Asking questions/solving problems" received the highest scores. Most

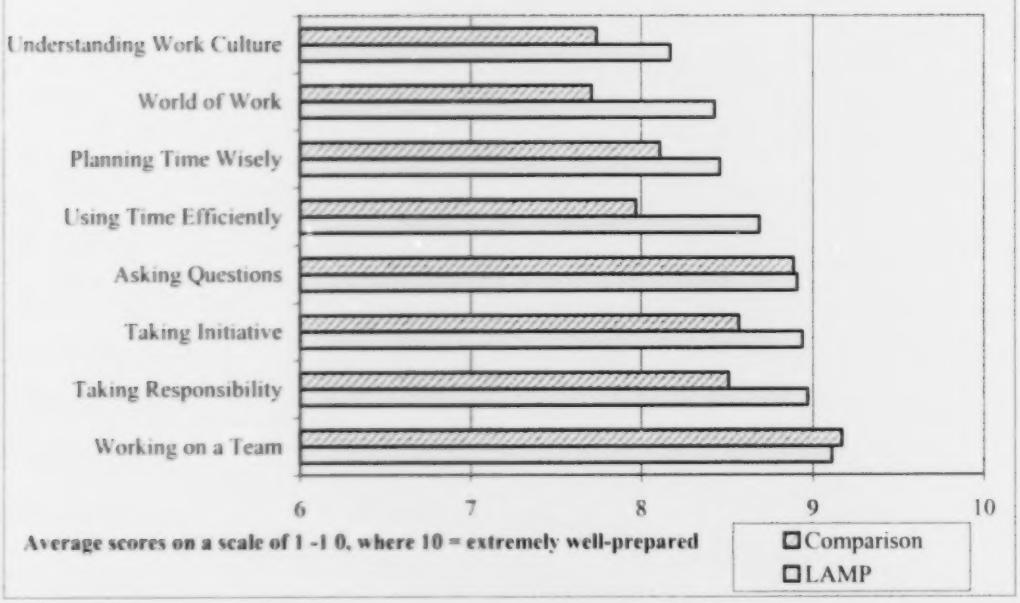
[6] Public Policy Associates 1999, *Lansing Tri-County EAG: High School Graduate Follow-Up Study*. Lansing, MI: Authors.

noteworthy is the fact that the categories with the greatest disparities in average ratings deal with the world of work: "Making career decisions" had a 1.35 difference; "Knowing how to act at work," had a 1.38 difference; and "Getting a job" had a 1.56 difference. LAMP students consistently report that their last year of high school better prepared them for post-secondary education and employment.

Preparation for Work

We also asked the graduates to assess how well prepared they were for particular aspects of the workplace experience after leaving high school. The responses of LAMP graduates indicate that they felt fairly well prepared for these aspects of the employment experience. Given the disparity between the LAMP graduates' and the comparison group's assessments of the helpfulness of their high school experiences to the work related items, it is not surprising to find that LAMP graduates ranked their preparation at a higher level than did their counterparts. Means are reported in Figure 8.

Figure 8: How Well Prepared for Employment?
Class of 1999

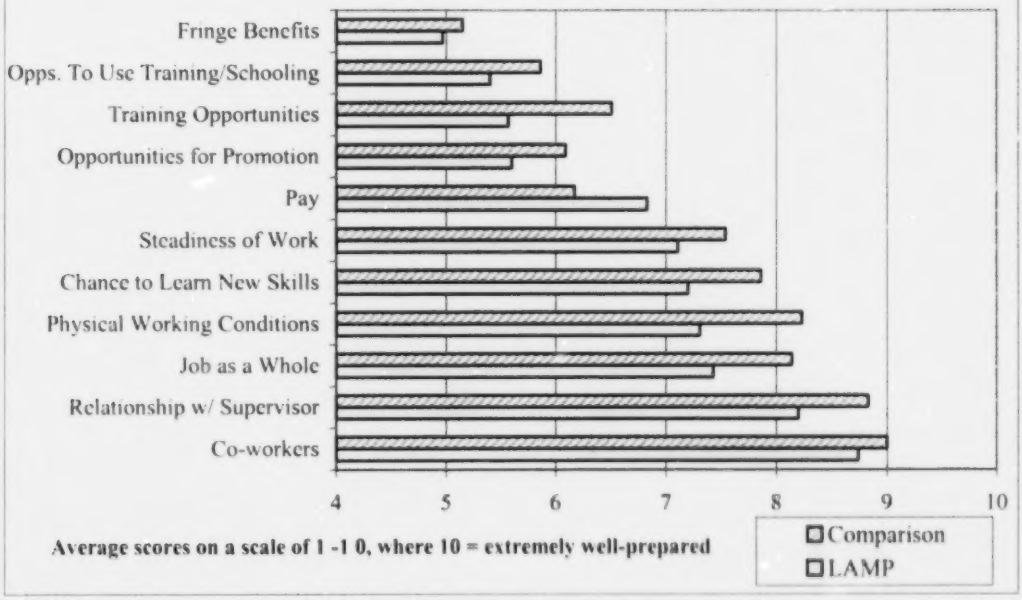


The LAMP Class of 1999 consistently reported they were better prepared for the world of work than their counterparts. The LAMP students ranked their preparation significantly higher on all of the elements with the exception of "Working on a team," and "Asking questions/asking for help," which were essentially even. Again, it is important to point out the elements with the largest differences in ratings. In this case, the most significant contrasts were reported in the assessment of their preparation for "Using time efficiently" and for the "World of work in general." The latter is especially noteworthy because it is an overall self-evaluation. That LAMP students assess themselves so highly indicates a remarkable level of comfort with the work environments.

Job Satisfaction

During the December 1999 survey administration, all employed graduates were asked to rate their satisfaction with various aspects of their jobs. Again, examination of these ratings reveals the areas the graduates felt were most and least satisfying. Means are presented in Figure 9. When the LAMP ratings are compared to the ratings of the comparison group, significant differences between the groups emerge. The LAMP graduates expressed lower levels of satisfaction with almost every characteristic they were asked to rank. The greatest differences came with their satisfaction with the "Training opportunities" and "Physical working conditions," followed by the "Job as a whole" and the "Chance to learn new skills." Curiously, the only characteristic that the LAMP graduates rated higher than the comparison group was "Pay." This is interesting because at the time of the survey administration, the LAMP graduates were earning over 40 cents *less* per hour than their counterparts.

Figure 9: Level of Satisfaction with Aspects of Current Job; Class of 1999



Taken together, the above findings begin to draw a picture of the qualities that the LAMP graduates are seeking in these initial work years. First, they seem to be comfortable working with others and least critical of the relationships they have with their co-workers and supervisors. Secondly, they put a high premium on the usefulness of their current position to their future plans. Thus -- as they are young and likely in entry level positions-- they assess these positions in terms of what the positions mean for their futures: Will they have opportunities to learn and develop new skills? Will the position allow them to use the skills they have been trying to develop? Are there opportunities for promotion? All of these questions seem to be more important than pay when it comes to evaluating the position they have.

Why is this so? We suspect that participation in the LAMP program fostered both an understanding of how a high performance workplace ought to run, as well as an understanding that the student's initial work experiences should provide steps toward their achievement of career goals. As such, the LAMP graduates would be likely to judge their work environments more harshly given their exposure to the ideas surrounding how workplaces ought to be operated. Likewise, the career development path provided by their employer might also be judged harshly given the LAMP graduates' learning with respect to what an effective career development or training program ought to include. This suggests that LAMP graduates may be less satisfied than counterparts in their initial entry-level jobs. A most interesting question arises from this analysis. Given their experiences in what we believe is the superior career preparation and career guidance of the LAMP program, will LAMP graduates shift from being less satisfied to being more satisfied with their jobs as they get closer to and or reach their career goals? We suspect that continued study of these groups will bear this out.

Benefits and Tuition Assistance

The LAMP graduates do not appear to be taking full advantage of training opportunities or tuition assistance available through their employers. Given the LAMP graduates' interest in education and training, the pattern of their usage of training opportunities and tuition assistance from their employers is puzzling. Of the students who worked in 1999-2000, 57% of the LAMP graduates and 43% of the comparison group graduates had access to training opportunities through their employers. Only 40% of the LAMP graduates took advantage of job related skills training, while 80% of the comparison group did so. At the same time, 31% of LAMP and 29% of comparison group graduates had access to tuition assistance through their employers. Only 18% of the LAMP graduates took advantage of the tuition assistance, as compared to 50% of the comparison group. The cause of this disparity is unclear.

This failure to utilize training and tuition benefits is especially puzzling given the fact that so many LAMP graduates who work are also attending school. We suspect it may be that the LAMP graduates are receiving their career training in school, and as such do not need the additional training available from their employers. Or in the case of tuition assistance, the requirements placed upon employees who accept tuition assistance might be prohibitive. To get some clarity on this issue, we will continue to monitor the data related to benefits and tuition assistance. We also plan to conduct qualitative interviews during the next wave of data collection to gain a more in-depth understanding of these data.

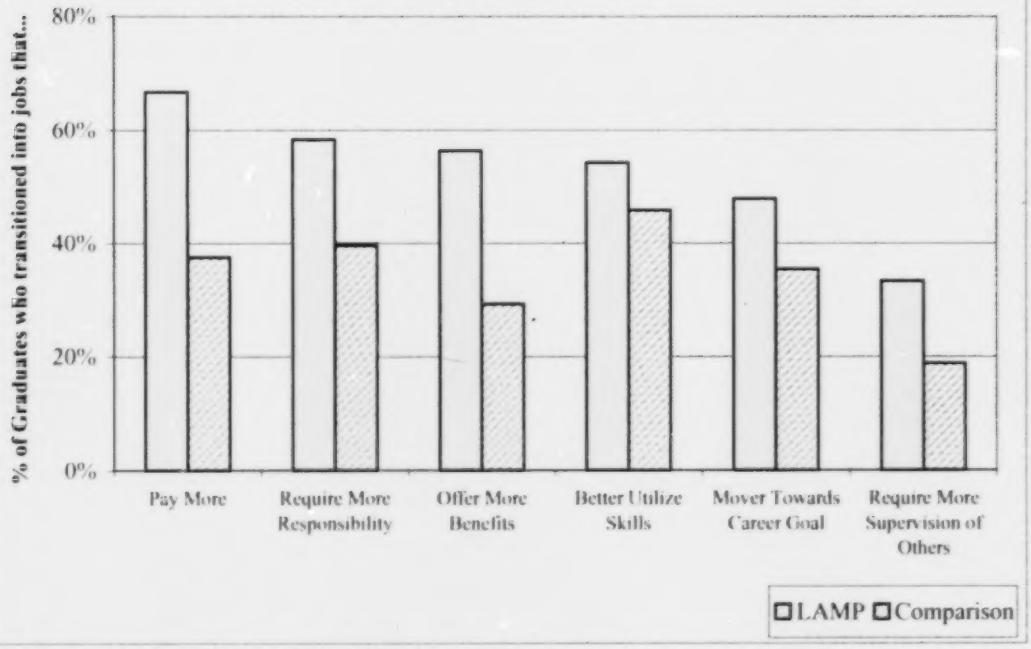
Job Change

Given the low levels of job satisfaction, we were not surprised to find that most of the LAMP students (60%) changed jobs between the December 1999 and June 2000. In fact, the pattern of job changes among the LAMP graduates is one of the more interesting characteristics of the early employment experiences of the study participants. The vast majority of the LAMP graduates have had at least one job change thus far.

There is a measurable difference between the experiences of the LAMP graduates and the comparison group. While 60% of the LAMP 1999 graduates changed jobs between

December 1999 and June 2000, 50% of the comparison group did so during that time. More significant are the differences in the percentage of each group that made "positive" gains through changing jobs. As shown in Figure 10, a greater percentage of LAMP graduates reported changing to jobs that paid more, offered more benefits, required the use of more skills, and represented a move forward towards their career goals.

Figure 10: Job Progression; Class of 1999



While the data point to a LAMP advantage in this area, we are hesitant to draw major conclusions on job change patterns at this juncture for two reasons. First, following a brief analysis of the participants' stated career goals, their previous positions and their current positions, it is difficult to understand the criteria respondents used to determine whether their job changes were positive steps towards their career goals. Secondly, it is not yet clear why these moves have been made, nor is it clear what impact these job changes have had or will have on the LAMP graduates' pursuit of their career goals. We believe these issues also require further study.

Setting these concerns aside, we believe it is a positive sign that graduates are moving into jobs that offer more benefits, pay, and require increasing levels of responsibility, skill, etc. We also believe that the LAMP graduates' claims to be making moves towards their career goals should be taken as a positive sign. However, we must note that the absence or lack of such moves does not necessarily represent a lack of progress, or even slower progress towards career goals. This is for two reasons. First, students may already be in jobs that can facilitate their advancement into the careers that they have decided to pursue. Secondly, employment at this stage in the graduates' lives may be

intended only to serve the objective of "paying bills" while they move toward their educational goals. For some students, school is the primary means towards achieving their career goals. For others, their current employment may be the primary vehicle, and for others still, it is the tandem—school and employment—that promises to push them along their career path. Thus, what we take away from this analysis is an indicator of what moves are being made and where the students are at this moment in time. The real value in tracking these issues will come years from now when we can assess the relationship between these early job changes and final outcomes.

VII CONCLUSIONS

It would be premature at this point to draw definitive conclusions about the long-term effects of LAMP, especially given the high numbers of graduates who are currently either enrolled in college or in a training program. However, the interim findings are extremely promising. LAMP students are pursuing post-secondary education at higher rates than comparison groups. As a group, the LAMP students are maintaining good grades, and a significant majority of these students are working *and* attending school at the same time. LAMP graduates appear to have been better prepared for the transition from high school to college and employment.

The examination of the LAMP graduates' employment experiences revealed some surprising and important findings. The graduates' initial dissatisfaction with their jobs was unexpected. They indicated that they were particularly dissatisfied by their opportunities for training and advancement. Furthermore, they have changed jobs at higher rates than the comparison group. Most have made at least one job change. Significant proportions made moves to positions that not only paid more and offered more benefits, but also gave them more responsibility and required the use of more skills. Many LAMP graduates felt that their job changes had produced positive steps toward their career goals.

Examining all of the data together suggests that the LAMP graduates are still preparing for their futures. More than that, it seems the graduates have consciously decided to invest in their education and training, rather than in employment. Virtually all of them are in school or a training program. In fact, the vast majority are enrolled in college. This is a bit surprising. Neither AED-NIWL staff nor the program organizers expected such a high proportion of the LAMP students to go on to college and training programs. While most have also sought employment, it seems clear that for the vast majority, their jobs are not their primary route to their career goals – their education is. Employment at this stage seems to be a necessity for most of the graduates, while schooling is the primary vehicle for achieving their career goals.

As education is so central to the activities of the graduates, tracking their persistence in their respective programs and their ultimate completion of these programs is even more critical to understanding the impact of the LAMP program. While program administrators can take pride in interim results like the rate of participation in post-secondary education or the ease of the transition from high school into post-secondary education and employment, the ultimate impact of the LAMP program will have to be judged in terms of how the program has helped students transition into the careers of their choice. That transition will begin to be visible later this year as more students complete their two-year education programs.